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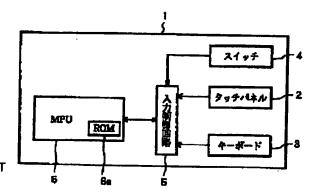
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TITLE

: PORTABLE ELECTRONIC EQUIPMENT



ABSTRACT: PURPOSE: To improve the operability of a portable electronic equipment when the data are inputted without using a keyboard by instructing the inhibition of use of a keyboard for input of data and disregarding the data inputted through the keyboard at when the input of data is inhibited.

> CONSTITUTION: When a pen input operation is carried out with use of a touch panel 2, a keyboard input inhibition switch 4 is turned on. An MPU 6 recognizes the ON state of the switch 4 and inhibits the data from being inputted through the keyboard 3. If the fingers, etc., touch the keyboard 3 by mistake while the inhibition is instructed for input of the data, the data inputted through the keyboard 3 are disregarded. When a key input operation is desired again through the keyboard 3, the switch 4 is turned off so that the data can be inputted again through the keyboard 3. Thus the operability of a portable electronic equipment is improved when the data are inputted without using the keyboard 3.

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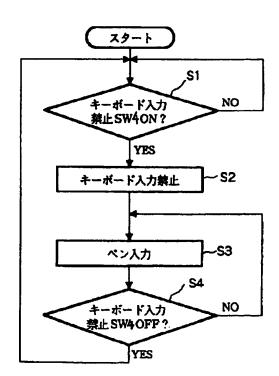
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## (54) 【発明の名称】 携帯型電子機器

## (57)【要約】

【目的】 ベンを用いて入力する場合に、キーポードよりの入力を禁止することにより、オペレータが意図しない誤入力を防止できる携帯型電子機器を提供することを目的とする。

【構成】 スイッチ4により、キーボード3よりの入力 禁止が指示されると、その指示に応じて、MPUはキー ボード3よりの入力を無視する。



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チ4をオンにすることにより、キーボード3による餌入 力を防止することが可能となった。

【0017】尚、本発明は、複数の機器から構成される システムに適用しても、1つの機器から成る装置に適用 しても良い。また、本発明はシステム或は装置に本発明 を実施するプログラムを供給することによって達成され る場合にも適用できる。

【0018】以上説明したように本実施例によれば、ペ ンを使って入力を行う場合に、キーポードによる入力を **競止するスイッチを備えることにより、誤ってキーポー 10 【図3】本実施例の携帯型電子機器における動作を示す** ドにタッチすることにより成されるキーボードよりの誤 入力を防止できる。これにより、例えば、キーボード3 の上に手を載せたままで、ベンによる入力を行うことが できるため、機器の操作性を大幅に向上することができ **٥.** 

#### [0019]

【発明の効果】以上説明したように本発明によれば、ペ ンを用いて入力する場合に、キーボードよりの入力を禁 止することにより、オペレータが意図しない餌入力を防 止できる効果がある。

【0020】また本発明によれば、キーポードを使用し ないデータの入力時における操作性を高めることができ る効果がある。

#### [0021]

#### 【図面の簡単な説明】

【図1】本発明の一実施例の携帯型電子機器の概観図で ある。

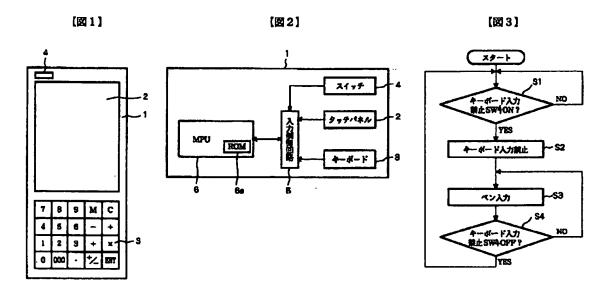
【図2】本実施例の携帯型電子機器の構成を示すプロッ ク図である。

フローチャートである。

【図4】従来例を説明する図である。

#### 【符号の説明】

- 1 携帯型電子機器
- 2 タッチパネル
- 3 キーボード
- 4 スイッチ
- 5 入力制御回路
- 6 MPU
- 20 6a ROM

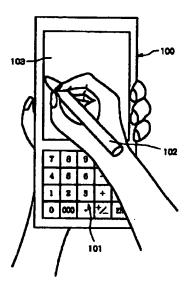


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#### **CLAIMS**

# [Claim(s)]

[Claim 1] The portable electronic apparatus characterized by having a directions means to be the portable electronic apparatus which has a keyboard and the coordinate input section, and to direct prohibition of the input from said keyboard, and a control means by which the input from said keyboard is disregarded when prohibition of an input is directed by said directions means.

[Claim 2] It is the portable electronic apparatus according to claim 1 characterized by said directions means being a switch.

[Claim 3] It is the portable electronic apparatus according to claim 1 characterized by said coordinate input section containing a touch panel.

#### **DETAILED DESCRIPTION**

## [Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to the portable electronic apparatus equipped with a keyboard and the coordinate input section.

[0002]

[Description of the Prior Art] By portable electronic equipment like the conventional electronic notebook, there are some which perform the input of a character etc. by preparing a keyboard and the touch panel of the display screen and one, and drawing a character using a pen on such a touch panel.

[0003]

[Problem to be solved by the invention] It was such equipment, and as shown, for example in <u>drawing 4</u>, when inputting a character etc. on a touch panel 103 using a pen 102, the hand touched the keyboard 101 accidentally and there was a problem of performing the key input which an operator does not mean.

[0004] This invention was made in view of the above-mentioned conventional example, and when inputting using a pen, it aims at offering the portable electronic apparatus which can prevent the erroneous input which an operator does not mean by forbidding the input from a keyboard.

[0005] Other objects of this invention are to offer the portable electronic apparatus which can raise the operability at the time of the entry of data which does not use a keyboard. [0006]

[Means for solving problem] In order to attain the above-mentioned object, the portable electronic apparatus of this invention is equipped with the following composition. That is, it is the portable electronic apparatus which has a keyboard and the coordinate input section, and has a directions means to direct prohibition of the input from said keyboard, and a control means by which the input from said keyboard is disregarded when prohibition of an

input is directed by said directions means.

[0007]

[Function] In the above composition, if prohibition of the input from a keyboard is directed, it will operate so that the input from a keyboard may be disregarded according to the directions.

[8000]

[Working example] With reference to an accompanying drawing, the suitable example of this invention is hereafter explained to details.

[0009] <u>Drawing 1</u> is general-view drawing of the portable electronic apparatus of one example of this invention.

[0010] In this drawing, by 1 showing the portable electronic device of this example, 2 is the touch panel which is the input section of a device, and can input that character by using a pen etc. on this touch panel 3, and drawing a character etc. Moreover, drops, such as liquid crystal, are formed in the lower part of this touch panel 3. By displaying the result of having carried out character recognition of the character drawn on this touch panel 3, and the character inputted in handwriting, or displaying various menus etc., and directing the item of that menu, it is constituted also so that processing corresponding to that menu can be carried out. 3 is a keyboard and a numerical keypad and various function keys are prepared like a graphic display. 4 is a keyboard entry prohibition switch and forbids the input by a keyboard 3 at the time of ON.

[0011] <u>Drawing 2</u> is the block diagram showing the composition of the portable electronic apparatus 1 of this example.

[0012] 5 is an input/output control circuit, and it connects with a touch panel 2, a keyboard 3, and a switch 4, and it is controlling the output to the data input of a twist, a drop, etc., respectively. 6 is MPU which controls the electronic equipment 1 whole of an example, and is controlling operation of the whole device according to the control program memorized by ROM 6a.

[0013] Operation based on the above composition is explained with reference to the flow chart of <u>drawing 3</u>. In addition, the control program which performs this processing is memorized by ROM 6a, and is executed under control of MPU6.

[0014] It investigates whether the keyboard entry prohibition switch 4 is ON, first, at Step S1, if it is ON, it will progress to Step S2, and the flag which forbids registration of a key input of a keyboard 3 is set. Next, it progresses to Step S3 and processes by reading the data inputted by the pen on a touch panel 2. The input from this touch panel 2 is repeatedly performed until the keyboard entry prohibition switch 4 is turned off at Step S4. If a switch 4 is turned off at Step S4, the flag set at Step S2 will be cleared, and it will return to Step S1. [0015] Thereby, in performing a pen input using a touch panel 2, it turns ON the keyboard entry prohibition switch 4. MPU6 recognizes that the switch 4 was turned on and stops receiving the input from a keyboard 3 thereby. For this reason, even if a finger, a hand, etc. touch a keyboard 2 accidentally, the data input by a keyboard 2 is not performed. And the

input from a keyboard 3 can be again enabled by turning off the keyboard prohibition switch 4 to perform a key input [ keyboard / 3 ] again.

[0016] As explained above, when inputting using a pen, it became possible to prevent the erroneous input by a keyboard 3 by turning ON the switch 4 which forbids the input from a keyboard 3.

[0017] In addition, even if it applies this invention to the system which consists of two or more devices, you may apply it to the equipment which consists of one device. Moreover, this invention can be applied also when attained by supplying the program which carries out this invention to a system or equipment.

[0018] As explained above, when inputting using a pen according to this example, the erroneous input from the keyboard accomplished by touching a keyboard accidentally can be prevented by having the switch which forbids the input by a keyboard. Since an input with a pen can be performed by this, for example, carrying a hand on a keyboard 3, the operability of a device can be improved substantially.

[Effect of the Invention] As explained above, when inputting using a pen according to this invention, it is effective in the ability to prevent the erroneous input which an operator does not mean by forbidding the input from a keyboard.

[0020] Moreover, according to this invention, there is an effect which can raise the operability at the time of the entry of data which does not use a keyboard.
[0021]